

### **Technical Deployment Requirements**

The several parties and partners involved in planning and implementing wireless E 9-1-1 each have specific deployment responsibilities. Each of the main partners shown below has, in turn, vendors that they must direct and rely upon to accomplish these responsibilities. The partners and their vendors are interdependent, and close interaction is essential to accomplishing wireless E 9-1-1 deployment.

#### **Public Safety Agency**

- CPE vendors - equipment upgrades;
- CAD and Mapping vendors - software and equipment changes and additions.

#### **Wireless Carrier**

- Telephone Switch Manufacturers - designers of Mobile Switching Center (MSC) software that supports wireless 9-1-1;
- 3<sup>rd</sup> Party Vendor - consulting and development activities to the wireless carrier, SCP services (NCAS/SCP method), project planning and management, data base development and loading, testing planning and management, ongoing service maintenance functions, and other support functions;
- Handset Manufacturers - development and manufacturing of feature specific handsets (including GPS capable for Phase II compatibility);
- Inter-exchange Carriers - provide connectivity via interstate and interlata facilities;
- Location Determination Technology (LDT) Developers and Manufacturers - provide LDT hardware, software, MPC equipment for data management and transmission;
- E 9-1-1 System Service Provider (service provider to both PSAP and wireless carrier) - provides access to Selective Routing and ALI data server (NCAS/SCP) to wireless carrier (or their SCP provider), wireless carrier circuit order and provisioning support, trunking to PSAP, software capability in Selective Router for Hybrid and CAS methods, integration and testing support to both wireless carriers and PSAPs; and
- Telephone Switch Manufacturers - designers and manufacturers of Selective Router switch and software features needed for wireless E 9-1-1 functions.

### **Status of Technology**

The technology to support NCAS and Hybrid methods is developed and being deployed for Phase I. The additions needed for Phase II are being developed and trialed. These include Location Determination systems, data interface software and associated systems, and data handling software in the ALI server and PSAP equipment areas. Since there are a number of potential vendors, there are also as many levels of preparedness (as of November 2001). In the case of wireless handset GPS methods of location determination, the logistics of manufacturing GPS-enabled handsets in sufficient quantities, and getting them distributed, is a major dependency.

In addition, as wireless E 9-1-1 implementations take place, experience results in the recognition of needed improvements, which are gradually being accommodated in the ongoing development process.

IS PHASE 1 IN THIS STATE?	CARRIER STATUS				STATE STATUS							NOTES:
	# of Carriers Reporting	No Phase 1	Active Phase 1 Deployment	Phase 1 Implemented Somewhere In State	NO Ph1	Pre Ph1	Ph 1	Central Planning Body?	TECH Preference?	Cost Recovery (CR) Status		
Alabama	5	1		4			1	Y		Pre-CR Carrier Compensation	At least one carrier has fully implemented Phase 1 throughout the state.	
Alaska	2	2			1					Post-CR Carrier Compensation		
Arizona	7	2	3	2			1	Y		Pre-CR Carrier Compensation	At least one carrier has fully implemented Phase 1 throughout the state.	
Arkansas	6	3	1	2			1					
California	6	3	3			1		Y		No Carrier CR	At least one carrier has fully implemented Phase 1 throughout the state.	
Colorado	6		2	4			1			Pre-CR Carrier Compensation		
Connecticut	4	2	2			1		Y	CAS	Pre-CR Carrier Compensation		
DC	4	4			1			Y				
Delaware	4	4			1			Y				
Florida	6			6			1	Y		Pre-CR Carrier Compensation		
Georgia	7	1	1	5			1	Y		Pre-CR Carrier Compensation		
Hawaii	3	3			1							
Idaho	5	4	1			1				No Carrier CR		
Illinois	6	1	1	4			1	Y		Pre-CR Carrier Compensation	At least one carrier has fully implemented Phase 1 throughout the state.	
Indiana	5	1	1	3			1	Y		Pre-CR Carrier Compensation		
Iowa	6	2	4			1		Y		Pre-CR Carrier Compensation		
Kansas	8	8			1					No Carrier CR		
Kentucky	6	2	2	2			1	Y		Pre-CR Carrier Compensation	One carrier has implemented Phase 1 50% through the state.	
Louisiana	5	2	1	2			1			Pre-CR Carrier Compensation		
Maine	5	4	1			1		Y		No Carrier CR		
Maryland	6	4	2			1		Y		No Carrier CR		
Mass.	4	3	1			1		Y	NCAS*			
Michigan*	7	2	2	3			1	Y		Pre-CR Carrier Compensation		
Minnesota	6	1	4	1			1	Y		Pre-CR Carrier Compensation		
Mississippi	4	2	1	1			1			Pre-CR Carrier Compensation		
Missouri	8	5	3			1		Y		No Carrier CR		
Montana	3	2	1			1		Y				
Nebraska	5	3	2			1						
Nevada	5	5			1					Pre-CR Carrier Compensation		
New Hampshire	5	4	1			1		Y		Pre-CR Carrier Compensation		
New Jersey*	5	1	2	2			1	Y	CAS	Pre-CR Carrier Compensation	At least one carrier has fully implemented Phase 1 throughout the state.	
New Mexico	6	4	2			1		Y				
New York	5	3	2			1						
North Carolina	5		1	4			1	Y		Pre-CR Carrier Compensation	One carrier has implemented Phase 1 throughout 2/3 of the state.	
North Dakota	2		2			1		Y				
Ohio	7	4	3			1		Y		No Carrier CR		
Oklahoma	7	7			1					Pre-CR Carrier Compensation		
Oregon	5	3		2			1	Y		Pre-CR Carrier Compensation	At least one carrier has fully implemented Phase 1 throughout the state.	
Pennsylvania	7	5	2			1				No Carrier CR		
Rhode Island	4	1		3			1	Y	RI-CAS	Pre-CR Carrier Compensation	Two carriers have fully implemented Phase 1 throughout the state.	
South Carolina	5	1		4			1	Y		Pre-CR Carrier Compensation		
South Dakota	3	1	1	1			1	Y				
Tennessee	7	2	1	4			1	Y		Pre-CR Carrier Compensation	At least one carrier has fully implemented Phase 1 throughout the state. Two carriers have fully implemented Phase 1 throughout the state.	
Texas	8			8			1	Y	Hybrid?	Pre-CR Carrier Compensation		
Utah	5	5			1							
Vermont	3	3			1			Y	NCAS	No Carrier CR		
Washington	5	1	1	3			1	Y		Pre-CR Carrier Compensation	At least one carrier has fully implemented Phase 1 throughout the state.	
West Virginia	4	1	1	2			1	Y		No Carrier CR		
Wisconsin	6	1	2	3			1			Pre-CR Carrier Compensation		
Wyoming	6	6			1			Y		No Carrier CR		
Alaska	4	4			1							
	268	133	60	75	10	16	24	347			INFORMATION CURRENT AS OF 7/15/2001	

State	Wireless Funding	Single Fund	Wireless Funding Amt. (\$)	Comments	Portion to Public Safety?	PS Amount	PS Purpose	Portion to Wireless Carrier?	WC Amount	WC Purpose	Legislation Type
Alabama	YES	YES	0.70	NA	YES	56%	Upgrading equipment & operating costs for E911	YES	44%	E911 cost recovery	Governing Statute
Alaska	YES	NO	0.50; 0.75	Municipalities with pop. >100K; Municipalities with pop. <100K	YES	Undetermined	E911 operations	YES	Undetermined	E911 cost recovery	HB 186
Arizona	YES	YES	0.37	NA	YES	Undetermined	E911 operations	YES	Undetermined	E911 cost recovery	HB 2625
Arkansas	YES	YES	0.50	NA	YES	38%	E911 operations	YES	58%	E911 implementation	HB 309
California	YES	NO	0.72	Could increase to \$0.75	YES	Undetermined	Specifics undetermined	NO	NA	NA	HB 1263
Colorado	YES	NO	0.70	Will not exceed current surcharge.	YES	Undetermined	ALI/ANI services	YES	Undetermined	Cost recovery for equipment	Governing Statute
Connecticut	YES	YES	0.28	Surcharge per access line, sliding scale down to \$0.06 per line if over 100.	YES	Undetermined	E911 expenses	YES	Undetermined	E911 expenses	Governing Statute
Delaware	YES	YES	0.60	NA	YES	Undetermined	E911 operations	YES	Undetermined	E911 implementation	HB 283
District of Columbia	YES	NO	0.56	NA	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined
Florida	YES	YES	0.50	NA	YES	44%	Full cost recovery - E911 expenses	YES	54%	Full cost recovery - E911 expenses	Governing Statute
Georgia	YES	NO	1.00	Lower surcharge will be issues - \$1.00 or amount charged to wireline.	YES	Undetermined	Phase 1 cost recovery	YES	30%	Phase 1 cost recovery	Governing Statute
Hawaii	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Idaho	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Illinois	YES	YES	0.75	NA	YES	67%	E911 maintenance and upgrade costs	YES	33%	E911 cost recovery	Governing Statute
Indiana	YES	YES	0.65	NA	YES	54%	E911 cost recovery	YES	39%	E911 cost recovery	Governing Statute
Iowa	YES	YES	0.50	NA	NO	NA	NA	YES	100%	E911 cost recovery	Governing Statute
Kansas	NO	NA	NA	Proposed legislation did not pass.	NA	NA	NA	NA	NA	NA	HB 2034
Kentucky	YES	YES	0.70	NA	YES	50%	Upgrading equipment & operating costs for E911	YES	50%	Upgrading equipment & operating costs for E911	HB 99
Louisiana	YES	NO	0.85	Will not exceed current surcharge.	YES	Undetermined	Specifics undetermined	YES	Undetermined	Specifics undetermined	HB 426
Maine	YES	YES	0.50	NA	YES	Undetermined	E911 staffing & operating costs	NO	NA	NA	Governing Statute
Maryland	YES	YES	0.60	NA	YES	Undetermined	E911 system costs	NO	NA	NA	Governing Statute
Massachusetts	NO	NA	0.30	Proposed legislation is pending.	NA	NA	NA	NA	NA	NA	Senate Bill 1920
Michigan	YES	YES	0.55	NA	YES	48%	Specifics undetermined	YES	48%	Specifics undetermined	Governing Statute
Minnesota	YES	YES	0.27	Includes range of \$0.08 and \$0.30 plus \$0.10 interim fee per month.	YES	50%	E911 cost recovery	YES	12%	E911 cost recovery	Governing Statute
Mississippi	YES	YES	1.00	NA	YES	70%	E911 operations	YES	30%	E911 implementation	Governing Statute
Missouri	NO	NA	NA	Proposed legislation did not pass.	NA	NA	NA	NA	NA	NA	HB 826
Montana	YES	NO	0.50	Split between basic and enhanced 911.	YES	Undetermined	Specifics undetermined	YES	50%	E911 implementation	Governing Statute
Nebraska	YES	YES	0.50	Will not exceed current surcharge.	Undetermined	Undetermined	Specifics undetermined	YES	Undetermined	Specifics undetermined	Legislative Bill 585
Nevada	YES	NO	0.25	Affects counties with less than 40K, but more than 100k in population.	YES	Undetermined	Personnel costs related to E911 implementation.	YES	Undetermined	E911 implementation	Senate Bill 569

State	Wireless Funding	Single Fund	Wireless Funding Amt. (\$)	Comments	Portion to Public Safety?	PS Amount	PS Purpose	Portion to Wireless Carrier?	WC Amount	WC Purpose	Legislation Type
New Hampshire	YES	NO	0.42	NA	Undetermined	Undetermined	Specifics undetermined	YES	Undetermined	E911 implementation	Governing Statute
New Jersey	YES	YES	Not stated in statute	Annual appropriation	Undetermined	Undetermined	Specifics undetermined	YES	Undetermined	E911 implementation	Governing Statute
New Mexico	YES	YES	0.51	NA	YES	Undetermined	E911 operations	YES	Undetermined	E911 implementation	HB 339
New York	YES	NO	0.70	All surcharge moneys are earmarked for payment of state police costs related to the statewide operation of cellular 911.	NO	NA	NA	Undetermined	Undetermined	Specifics undetermined	Governing Statute
North Carolina	YES	YES	0.80	NA	YES	40%	E911 operations	YES	60%	E911 implementation	Governing Statute
North Dakota	YES	NO	1.00	Will not exceed current surcharge.	Undetermined	Undetermined	Specifics undetermined	YES	Undetermined	E911 implementation	Senate Bill 2067
Ohio	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oklahoma	YES	NO	0.50	Until contributions equals \$5 million.	Undetermined	Undetermined	Specifics undetermined	YES	Undetermined	E911 implementation	Governing Statute
Oregon	YES	YES	0.75	NA	Undetermined	Undetermined	Specifics undetermined	YES	35%	E911 implementation	Governing Statute
Pennsylvania	NO	YES	0.50	Proposed legislation is pending.	NA	NA	NA	NA	NA	NA	Senate Bill 884
Rhode Island	YES	YES	0.47	NA	Undetermined	Undetermined	Specifics undetermined	YES	Undetermined	E911 implementation	Governing Statute
South Carolina	YES	YES	0.55	NA	YES	39%	Personnel costs related to E911 implementation.	YES	57%	E911 implementation	Governing Statute
South Dakota	YES	NO	0.75	NA	YES	Undetermined	E911 operations	NO	NA	NA	Governing Statute
Tennessee	YES	YES	1.00	NA	Undetermined	Undetermined	Specifics undetermined	YES	Undetermined	E911 implementation	Governing Statute
Texas	YES	YES	0.50	NA	Undetermined	Undetermined	Specifics undetermined	YES	Undetermined	E911 implementation	Governing Statute
Utah	YES	NO	0.53	NA	Undetermined	Undetermined	Specifics undetermined	YES	Undetermined	E911 implementation	Governing Statute
Vermont	NO	YES	NA	911 system financed through annual legislative appropriation	YES	Undetermined	E911 operations	NO	NA	NA	Governing Statute
Virginia	YES	YES	0.75	NA	YES	Undetermined	E911 operations	YES	Undetermined	E911 implementation	Governing Statute
Washington	YES	YES	0.25	NA	YES	Undetermined	E911 operations	NO	NA	NA	Governing Statute
West Virginia	YES	NO	0.94	NA	YES	Pro rata share of proceeds.	E911 operations	YES	Undetermined	E911 implementation	Governing Statute
Wisconsin	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Wyoming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA



## Motorola A820

Torn between needing a mobile office and wanting a high-tech toy? There's no need to choose with the Motorola A820. For fast-paced business trips around the globe, the Motorola A820 provides a multi-functional voice/data solution. On a personal note, take the fun a step further by customizing your messages with video or audio files. And, for that much needed down time, choose from fashionable entertainment with the embedded MP3 player, a suite of games and the integrated video camera that allows you to show your world to others – whether that world is in Italy, Hong Kong or Down Under! The Motorola A820 brings in the dawn of a new mobile phone experience – are you ready for the MotoMOTHERSHIP?



- **Tifs Or Gifs**

Impress your friends with video postcards and visually rich messages with new MMS (Multi-media Messaging Service)\* technology. You don't have to be tech-savvy to use this fun feature – just attach audio and video files to e-mail messages and send with a smile!

- **Multi-faceted, Multi-talented**

The Motorola A820's Multi-call feature allows you to be on a voice call and download data from the Net at the same time, proving that our technology is as smart as it looks. You can multi-task, so why shouldn't your phone?

- **Tailor Made**

Customize your phone by adding the latest games and applications. Have fun with the newest in animated graphics, easily seen on the large screen and more than 4,000 unique colors.

- **Dancin', Dancin', Dancin'**

With an embedded MP3 player, you'll be dancing all night long. Download hours of your favorite MP3 music with a few easy steps and let the tunes take control. March to your own drummer and download the latest MP3 samples for your own personalized ring tones.

- **The Phone Heard 'Round the World**

With 2G, 2.5G and 3G technology combined in one device, the Motorola A820 operates in most major cities in more than 170 countries, keeping you connected while on the go.

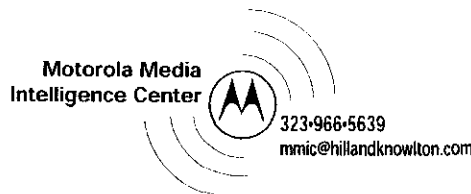
- **Lost And Found**

A-GPS helps you locate your position and get you where you need to go\*. Find the nearest restaurants, bars or movie theatres easily -- your biggest decision will be what to choose!

- **Do You See What I See?**

The integrated video camera allows you to capture still shots and download movie clips to preview remotely at will. Now you can get the last laugh by sending photos as e-mail attachments.

For more information, please contact:



\* Network, subscription and SIM card or service provider dependent feature. Not available in all areas.

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## News

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### **U.S. Transportation Officials Call For National Commitment to Wireless E9-1-1 System**

U.S. Transportation Secretary Norman Y. Mineta, Transportation Chief of Staff John Flaherty and National Highway Traffic Safety Administrator Jeffrey W. Runge, M.D., at a national E9-1-1 summit today called on public safety officials, the telecommunications industry and communities across the country to accelerate implementation of wireless enhanced 9-1-1 (E9-1-1) services.

The summit in Arlington, VA, was convened at the direction of Secretary Mineta. "Events of September 11 highlight the need to be able to quickly and precisely locate people when they make 9-1-1 calls on cellular phones," Secretary Mineta said. "When people are injured, response time is critical in determining survivability, and bringing experts together like this will help expedite deployment of wireless E9-1-1."

When completed nationwide, enhanced wireless 9-1-1 will enable public safety call centers to exactly locate cellular telephone users making emergency calls. Ninety-eight percent of America's population can quickly be located when making emergency calls from residential, landline phones. However, 25 percent of 9-1-1 calls are placed from wireless phones, and 40 percent of these calls are not covered by enhanced 9-1-1.

Elected officials, representatives from the wireless industry, State and local governments, public safety call centers, emergency medical services, police and fire departments, and the transportation industry participated in the summit. The Department will continue to work with the Federal Communications Commission in implementing E9-1-1.

Less than 40 percent of wireless phone users are covered by service that provides caller number identification. Location identification service for wireless telephone users is not yet available across most of the United States. If traveling 9-1-1 callers become disoriented, lost or are unable to speak, emergency response to their wireless calls will normally be delayed without E9-1-1.

Implementing a wireless E9-1-1 system that identifies the location of callers is complex because of the new technology it requires and the changes that will be necessary in the processes for handling and responding to emergency calls.

Accelerating wireless E9-1-1 implementation is a key initiative of Secretary Mineta and is coordinated through DOT's Intelligent Transportation Systems (ITS) program. ITS saves lives, time, and money through combining advanced communications and transportation technologies to manage and operate surface transportation systems. For more information, visit DOT's ITS web site at [www.its.dot.gov](http://www.its.dot.gov).

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